

## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview William F. Westerman (Reg. No.: 29,988) with on June 12, 2008.

The application has been amended as follows:

Replace claim 1 with the following:

1 (Currently Amended) An image recognition apparatus for recognizing movements of players matched against each other between domains partitioned with such an obstacle as net in a sport match or game from contents including a television program being telecasted to show the sport match or game, an image material in an uncompleted state for broadcasting and contents recorded in ~~[[such]]~~ a recording medium ~~as a VTR~~, the image recognition apparatus comprising: a picture information obtaining section configured to obtain picture information containing an image of a movement of at least one of the players playing in the sport match or game from the contents; a sound information obtaining section configured to obtain sound information generated in synchronism with the picture information from the contents, the sound

information including information on a hitting sound generated upon hitting of ~~[[such]]~~ an instrument ~~as a ball~~ moving between the domains to serve as an object of score count in the sport match or game; a hitting time information specifying section configured to specify a hitting time at which the instrument is hit based on the sound information obtained by the sound information obtaining section; a rule information storage section configured to store rule information for carrying out the sport match or game; and an image substance recognizing section configured to recognize a substance of an image containing the image of the movement of the player provided by the picture information based on the picture information obtained by the picture information obtaining section, a position of the instrument at the hitting time specified by the hitting time specifying section and the rule information stored in the rule information storage section.

Replace claim 14 with the following:

14 (Currently Amended) An image recognition program stored on a computer readable medium cooperative with a computer for causing an image recognition apparatus to operate to recognize movements of players matched against each other between domains partitioned with such an obstacle as net in a sport match or game from contents including a television program being telecasted to show the sport match or game, an image material in an uncompleted state for broadcasting and contents recorded in ~~[[such]]~~ a recording medium ~~as a VTR~~

,the image recognition program being configured to cause the image recognition apparatus to function as: game from the contents; a sound information obtaining section configured to obtain sound information generated in synchronism with the picture information from the contents, the sound information including information on a hitting sound generated upon hitting of ~~[[such]]~~ an instrument ~~as a ball~~ moving between the domains to serve as an object of score count in the sport match or game; a hitting time information specifying section configured to specify a hitting time at which the instrument is hit based on the sound information obtained by the sound information obtaining section; a rule information storage section configured to store rule information for carrying out the sport match or game; and an image substance recognizing section configured to recognize a substance of an image containing the image of the movement of the player provided by the picture information based on the picture information obtained by the picture information obtaining section, a position of the instrument at the hitting time specified by the hitting time specifying section and the rule information stored in the rule information storage section.

### ***Allowance***

2. The following is an examiner's statement of reasons for allowance: The most pertinent prior art is Katayama (US Patent No.: 6,071,002) in view of Watabe et al (US Patent No.: 6,663,491). Katayama discloses an image recognition apparatus for recognizing movements of players matched against each other between domains

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partitioned with such an obstacle as net in a sport match or game from contents including a television program being telecasted to show the sport match or game, an image material in an uncompleted state for broadcasting and contents recorded in such a recording medium as a VTR, the image recognition apparatus comprising: a picture information obtaining section configured to obtain picture information containing an image of a movement of at least one of the players playing in the sport match or game from the contents; a sound information obtaining section configured to obtain sound information generated in synchronism with the picture information from the contents, the sound information including information on a hitting sound generated upon hitting of such an instrument as a ball moving between the domains to serve as an object of score count in the sport match or game; and a rule information storage section configured to store rule information for carrying out the sport match or game. However, Katayama does not expressly disclose a hitting time information specifying section configured to specify a hitting time at which the instrument is hit based on the sound information obtained by the sound information obtaining section. Watabe discloses a game apparatus comprising hitting time information specifying section configured to specify a hitting time at which the instrument is hit based on the sound information obtained by the sound information obtaining section. Note the discussion, Katayama in view of Yamada does not teach an image substance recognizing section configured to recognize a substance of an image containing the image of the movement of the player provided by the picture information based on the picture information obtained by the picture information obtaining section, a position of the instrument at the hitting time

specified by the hitting time specifying section and the rule information stored in the rule information storage section. The examiner finds no reason or motivation to combine the above references in an obvious rejection thus placing the application in condition for allowance.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Claims 1-14 are allowed.

### ***Conclusion***

5. The prior art made part of the record and not relied upon is considered pertinent to applicant's disclosure.

Davis (Patent No.: US 5,423,554) is cited to teach Virtual reality game method and apparatus

Black (Patent No.: US 5,802,220) is cited to teach Apparatus and method for tracking facial motion through a sequence of images

Iannazo (Patent No.: US 5,882,204) is cited to teach Football interactive simulation trainer

Hashimoto (Patent No.: US 6,081,619) is cited to teach Movement pattern recognizing apparatus

Macri (Patent No.: US 6,183,259) is cited to teach Simulated training method

Keaton (Patent No.: US 7,148,913) is cited to teach Vision-based pointer tracking and object classification method and apparatus

Matsumoto (Patent No.: US 7,160,191) is cited to teach Game machine, method and program

Mifune (Patent No.: US 7,300,345) is cited to teach Method and computer-readable medium for deploying characters in a game

Isobe (Patent No.: US 6,256,047) is cited to teach Method of judging hits and computer-readable storage medium storing game data

### ***Inquires***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrae S. Allison whose telephone number is (571) 270-1052. The examiner can normally be reached on Monday-Friday, 8:00 am - 5:00 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Meta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andrae Allison  
June 13, 2008

/Andrew W. Johns/  
Primary Examiner, Art Unit 2624